

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 17 MAR 2004

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Applicant's or agent's file reference newsystemPCT-5	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/IT 02/00780	International filing date (day/month/year) 11.12.2002	Priority date (day/month/year) 27.12.2001	
International Patent Classification (IPC) or both national classification and IPC H05K3/10			
Applicant NEW SYSTEM SRL et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
  
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 15 sheets.

3. This report contains indications relating to the following items:
 

I    ☒ Basis of the opinion

II   ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability



IV   ☐ Lack of unity of invention

V    ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI   ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

Date of submission of the demand  16.07.2003	Date of completion of this report  16.03.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Batev, P  Telephone No. +49 89 2399-7970  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IT 02/00780

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-10 received on 02.03.2004 with letter of 27.02.2004

**Claims, Numbers**

1-11 received on 02.03.2004 with letter of 27.02.2004

**Drawings, Sheets**

1/2, 2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-11
	No: Claims	none
Inventive step (IS)	Yes: Claims	1-11
	No: Claims	none
Industrial applicability (IA)	Yes: Claims	1-11
	No: Claims	none

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: DE 198 17 530 A (INSTITUT FÜR DIAGNOSTIKFORSCHUNG GMBH AN DER FREIEN UNIVERSITÄT BERLIN) 14 October 1999 (1999-10-14)  
D2: US-A-3 661 304 (MARTINEZ ET AL) 9 May 1972 (1972-05-09)

1. Although claim 1 is directed to a system, the wording of said claim is a mixture of device features and method steps. The category of said claim is, therefore, not clear (see the Guidelines, Chapter III-4.1).

The same objection applies to independent claim 6 which although directed to a machine contains expressions like "is controlled" and "is moved".

2. Insofar as the examiner can understand the claims, the following is pointed out:

2.1. The present invention appears to relate to a process and machine for depositing a liquefied material on a support surface.

2.2. Document D1 discloses (abstract) a process and device for production of multilayer thin-film structures, wherein a liquefied material is deposited pixel-by-pixel on a substrate in the form of fine drops or sprays, the deposition being controlled by a computer.

The solution proposed in claim 1 is distinguished this state of the art at least in that

- (i) means are provided for applying pressure having value  $p_1$  at the start of deposition and pressure having value  $p_2 < p_1$  during deposition of the liquefied material; and
- (ii) said means, during the non-operational phase, are able to apply a supply pressure having value  $p_3 > p_1$ .

The subject matter of claim 1 appears, therefore, novel (Article 33(2) PCT).

2.3. Document D2, which relates to a drop generator for use in high speed printing, discloses applying initial higher pressure to the liquid in order to produce immediately a

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stream of drops and avoid clogging or fouling of the passages.

None of the other cited documents, which reflect the technological background, discloses or gives an incitement to the specific solution defined in claim 1.

In view of the available prior art, the subject matter of claim 1 appears, therefore, to involve an inventive step (Article 33(3) PCT).

**2.4.** Independent claim 6 is directed to a machine for use in the system of claim 1 and, consequently, comprising the features (i) and (ii) mentioned above.

**2.5.** Claims 2 - 5 and 7 - 11 which define preferred embodiments of the invention are dependent on claim 1 or 6, respectively, and as such also appear to meet the requirements of the PCT in respect of novelty and inventive step.

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